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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/912,522

Filing Date: July 26, 2001 Appellant(s): KIM ET AL.

David L. Heath For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 9 January 2009 appealing from the Office action mailed 3 July 2008.

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

# (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

Two amendments to the claims after final rejection have been entered; the first was filed on 27 October (canceling dependent claims 8 and 15, and incorporating the limitation into independent claims 1, 4 and 11) and the second was filed on 1 December 2008 (amending the claimed 'units' to be 'computer units').

#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

# (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

5,721,910 UNGER et al. 02-1998

2003/0033295 ADLER et al. 02-2003

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5,862,223 WALKER et al. 01-1999

6,088,765 OHTSUKA 07-2000

# (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 101

Claims 4-18 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

In light of the Applicants' remarks regarding the proper interpretation of the claimed 'units', page 8,

Further, although the IP

information extraction unit, the IP information analyzing unit, and the E-mail receiving/transmitting unit are described as separate units, these elements can be provided in a single unit, in which case these units could be implemented as software units.

claims 4 and 11 are rendered non-statutory under 35 U.S.C. § 101.

Regarding claims 4 and 11, these claims are for a system for analyzing and utilizing intellectual property (IP) information. However, all of the elements claimed could be reasonably interpreted in light of the disclosure by an ordinary artisan as being software alone, and thus is directed to functional descriptive material [software *per se*], which is non-statutory. See *In re Warmerdam* (CAFC) 31 USPQ2d 1754 at 1759.

In order for software claims to be statutory, they must be claimed in combination with an appropriate medium and/or hardware to establish a statutory category of invention and enable any functionality to be realized. Compare *In re Lowry* (CAFC) 32 USPQ2d 1031 at 1031,1035 (claim to a data structure stored on a computer readable medium that increases computer efficiency held statutory) and *In re Warmerdam* (CAFC) 31 USPQ2d 1754 at 1759 (claim to computer having a specific data structure stored in memory held a statutory product-by-process claim) with *In re Warmerdam* (CAFC) 31 USPQ2d 1754 at 1760 (claim to a data structure per se held non-statutory).

Although the system is claimed as a *computer-based* system, the system is defined only by the claimed limitations. Since all claimed limitations are 'units', and since the Applicants have indicated that the proper interpretation of the claimed 'units' is that they can be implemented as software units, the claimed computer-based system is rendered software *per se*, and thus non-statutory.

Claims 5-10 and 12-18, fully incorporating the deficiencies of their respective parent claims, are likewise rejected.

## Claim Rejections - 35 USC § 103

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Unger et al.** (U.S. Patent 5,721,910) in view of **Adler et al.** (U.S. Patent Application Publication 2003/0033295).

Regarding claim 1, **Unger et al.** teaches a method for analyzing and utilizing intellectual property (IP) information substantially as claimed, comprising steps of:

a) registering search strategy formulas for extracting IP information (see disclosure that a set of expert searches [search strategy formulas] can be executed against a new set of patents and/or technical documents, col. 5, lines 64-66);

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b) accessing and searching Internet websites that provide IP information based on the registered search strategy formulas, and extracting first IP information according to the search (see disclosure that a set of expert searches [search strategy formulas] can be executed against a new set of patents and/or technical documents, col. 5, lines 64-66; see also col. 7, lines 26-40; see also disclosure that the full-text sources of patents or technical documents can reside on the Internet, col. 3, line 66 through col. 4, line 2);

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- c) converting the first IP information to a standard form and storing the first IP information, and transmitting the first IP information converted in the standard form to research center analyzing computer unit (see disclosure that the documents and/or abstracts and/or claims and/or technical indexing may be electronically stored in a relational database and linked to the categorization which reflects the overall hierarchical model, and furthermore that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51);
- d) accessing the Internet websites and extracting second IP information

  corresponding to the first IP information upon a request for detailed

  information (see disclosure that specific detail on individual documents

  and/or abstracts and/or claims may also be captured in discrete fields and

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linked to the categories within the hierarchical model and the technical documents and/or abstracts and/or claims, and can be linked to full-text sources of the documents, col. 2, lines 40-46; the examiner further notes that the very existence of intellectual property information implies a project which produced said information, meaning that any IP information is related to a project);

e) converting the second IP information to the standard form and storing the second IP information, and transmitting the second IP information converted in the standard form to research center analyzing computer unit (see disclosure that the documents and/or abstracts and/or claims and/or technical indexing may be electronically stored in a relational database and linked to the categorization which reflects the overall hierarchical model, and furthermore that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51);

wherein the step (c) includes steps of:

 i) determining if third IP information has been received from the research center analyzing computer unit, the third IP information including technical analyses and opinion contents (see disclosure of

the storage of a matrix of expert opinions, representing the cumulative opinion of a group of expert technical staff and/of scientists, col. 10, lines 40-48; see also col. 11, lines 34-45); and

ii) **storing the third IP information upon receiving the third IP information** (see disclosure of the storage of a matrix of expert opinions, representing the cumulative opinion of a group of expert technical staff and/of scientists, col. 10, lines 40-48; see also col. 11, lines 34-45);

wherein the IP information extraction computer unit stores a plurality of predetermined keywords (see disclosure that a set of expert searches [search strategy formulas] can be executed against a new set of patents and/or technical documents, col. 5, lines 64-66).

Unger et al. does not explicitly teach a method wherein the first IP information is discarded upon a determination by the research center analyzing computer unit that the first IP information is not related to at least one project accessible by the research center analyzing computer unit.

Adler et al., however, teaches a method wherein retrieved patent information is submitted to a relevancy filter, which deletes patent data which has been retrieved but which is deemed not to be relevant to the analysis to be performed (see paragraph [0045] et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to delete that retrieved patent information that is not deemed relevant, such as by not being pertinent to the project at hand, since this would advantageously allow users to minimize an amount of calculations to be carried out during the patent information assessment and minimize the amount of storage space required for storing the patent information (see paragraph [0045] et seq.).

Regarding claim 3, **Unger et al.** additionally teaches a method for analyzing and utilizing intellectual property (IP) information wherein step (d) includes steps of:

i) determining if fourth IP information has been received from the research
 center analyzing computer unit, the fourth IP information including
 technical analyses and opinion contents (see disclosure of the storage of a matrix of expert opinions, representing the cumulative opinion of a group

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of expert technical staff and/of scientists, col. 10, lines 40-48; see also col. 11, lines 34-45); and

ii) **storing the fourth IP information upon receiving the fourth IP information** (see disclosure of the storage of a matrix of expert opinions, representing the cumulative opinion of a group of expert technical staff and/of scientists, col. 10, lines 40-48; see also col. 11, lines 34-45).

Claims 4-7, 9-14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Unger et al.** (U.S. Patent 5,721,910) in view of **Adler et al.** (U.S. Patent Application Publication 2003/0033295) in view of **Walker et al.** (U.S. Patent 5,862,223).

Regarding claim 4, **Unger et al.** teaches a computer-based system for analyzing and utilizing intellectual property (IP) information substantially as claimed, comprising:

a) an IP information extraction computer unit which is coupled to an IP information analyzing computer unit, for extracting IP information according to operation of software from at least one on-line IP information database (DB) found on the Internet or on a network and

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computer unit (see disclosure that a set of expert searches [search strategy formulas] can be executed against a new set of patents and/or technical documents, col. 5, lines 64-66; see also col. 7, lines 26-40; see also disclosure that the full-text sources of patents or technical documents can reside on the Internet, col. 3, line 66 through col. 4, line 2; see also disclosure that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51);

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b) wherein the IP information analyzing computer unit controls the operation of the software, receives the extracted IP information and stores the same together with data containing opinion contents of the extracted IP information from research center analyzing computer unit, and outputs the extracted IP information (see disclosure that the documents and/or abstracts and/or claims and/or technical indexing may be electronically stored in a relational database and linked to the categorization which reflects the overall hierarchical model, and furthermore that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51; see also disclosure of the storage of a matrix of expert opinions, representing the cumulative

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opinion of a group of expert technical staff and/of scientists, col. 10, lines 40-48; see also col. 11, lines 34-45);

- c) wherein the research center analyzing computer unit is coupled to the IP information extraction computer unit and requests detailed information corresponding to the IP information that is related to the at least one project from the IP information extraction computer unit (see disclosure that specific detail on individual documents and/or abstracts and/or claims may also be captured in discrete fields and linked to the categories within the hierarchical model and the technical documents and/or abstracts and/or claims, and can be linked to full-text sources of the documents, col. 2, lines 40-46; the examiner further notes that the very existence of intellectual property information implies a project which produced said information, meaning that any IP information is related to a project);
- d) wherein the IP information extraction computer unit comprises:
  - i) a front page extraction computer unit for requesting front pages of IP information according to a universal resource locator (URL) for accessing the on-line IP information DB, and pre-registered access information including an access period, technical classifications, and a search format, and receiving and outputting the front pages

(see disclosure that the documents and/or abstracts and/or claims and/or technical indexing may be electronically stored in a relational database and linked to the categorization which reflects the overall hierarchical model, and furthermore that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51; see also disclosure at Stage III of drawing Figure 1 of front page information received and parsed into the database; see also disclosure that the full-text sources of patents or technical documents can reside on the Internet, col. 3, line 66 through col. 4, line 2);

wherein **the IP information extraction computer unit stores a plurality of predetermined keywords** (see disclosure that a set of expert searches

[search strategy formulas] can be executed against a new set of patents

and/or technical documents, col. 5, lines 64-66).

Unger et al. does not explicitly teach a system wherein the first IP information is discarded upon a determination by the research center analyzing computer unit that the first IP information is not related to at least one project accessible by the research center analyzing computer unit.

Adler et al., however, teaches a system wherein retrieved patent information is submitted to a relevancy filter, which deletes patent data which has been retrieved but which is deemed not to be relevant to the analysis to be performed (see paragraph [0045] et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to delete that retrieved patent information that is not deemed relevant, such as by not being pertinent to the project at hand, since this would advantageously allow users to minimize an amount of calculations to be carried out during the patent information assessment and minimize the amount of storage space required for storing the patent information (see paragraph [0045] et seq.).

Neither **Unger et al.** nor **Adler et al.** explicitly teaches a system including an email receiving/transmitting computer unit, although the fact that it does disclose the accessing of patents and/or technical documents over the Internet provides strong evidence of obviousness for the inclusion of email capability.

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Walker et al., however, teaches a system including an email receiving/transmitting computer unit (see col. 15, lines 21-42 et seq.), the Applicants' limitations of transmitting the extracted IP information and receiving opinion contents via email having been given no patentable weight as being merely a statement of intended use, although the reference also discloses the exchange of information between requester and an expert (see col. 18, lines 31-56; see also col. 26, lines 15-21).

It would have been obvious to include email capabilities in the system disclosed in the **Unger et al.** reference, since this would facilitate the exchange and accumulation of analysis and opinion information from experts without the necessity of having the experts all co-located at the central information facility.

Regarding claim 11, **Unger et al.** teaches a computer-based system for analyzing and utilizing intellectual property (IP) information substantially as claimed, comprising:

a) an IP information extraction computer unit which is coupled to an IP information analyzing computer unit, for extracting IP information according to operation of software from at least one on-line IP information database (DB) found on the Internet or on a network and

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computer unit (see disclosure that a set of expert searches [search strategy formulas] can be executed against a new set of patents and/or technical documents, col. 5, lines 64-66; see also col. 7, lines 26-40; see also disclosure that the full-text sources of patents or technical documents can reside on the Internet, col. 3, line 66 through col. 4, line 2; see also disclosure that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51);

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b) wherein the IP information analyzing computer unit for controls the operation of the software, provides technical classifications and search strategy formulas to the IP information extraction computer unit, receives the extracted IP information and stores the same together with data containing opinion contents of the extracted IP information from research center analyzing computer unit, and outputs the extracted IP information (see disclosure that the documents and/or abstracts and/or claims and/or technical indexing may be electronically stored in a relational database and linked to the categorization which reflects the overall hierarchical model, and furthermore that the documents, etc., can be displayed on a computerized graphical interface [research center personal

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computers], col. 3, lines 46-51; see also disclosure of the storage of a matrix of expert opinions, representing the cumulative opinion of a group of expert technical staff and/of scientists, col. 10, lines 40-48; see also col. 11, lines 34-45);

- information extraction computer unit and requesting detailed information corresponding to the IP information that is related to the at least one project from the IP information extraction computer unit (see disclosure that specific detail on individual documents and/or abstracts and/or claims may also be captured in discrete fields and linked to the categories within the hierarchical model and the technical documents and/or abstracts and/or abstracts and/or claims, and can be linked to full-text sources of the documents, col. 2, lines 40-46; the examiner further notes that the very existence of intellectual property information implies a project which produced said information, meaning that any IP information is related to a project); and
- d) wherein **the IP information extraction computer unit stores a plurality of**predetermined keywords (see disclosure that a set of expert searches

and/or technical documents, col. 5, lines 64-66).

[search strategy formulas] can be executed against a new set of patents

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**Unger et al.** does not explicitly teach a system wherein the first IP information is discarded upon a determination by the research center analyzing computer unit that the first IP information is not related to at least one project accessible by the research center

analyzing computer unit.

Adler et al., however, teaches a system wherein retrieved patent information is submitted to a relevancy filter, which deletes patent data which has been retrieved but which is deemed not to be relevant to the analysis to be performed (see paragraph [0045] et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to delete that retrieved patent information that is not deemed relevant, such as by not being pertinent to the project at hand, since this would advantageously allow users to minimize an amount of calculations to be carried out during the patent

information assessment and minimize the amount of storage space required for storing the patent information (see paragraph [0045] et seq.).

Neither **Unger et al.** nor **Adler et al.** explicitly teaches a system including an email receiving/transmitting computer unit, although the fact that it does disclose the accessing of patents and/or technical documents over the Internet provides strong evidence of obviousness for the inclusion of email capability.

Walker et al., however, teaches a system including an email receiving/transmitting computer unit (see col. 15, lines 21-42 et seq.), the Applicants' limitations of transmitting IP information and receiving opinion contents via email having been given no patentable weight as being merely a statement of intended use, although the reference also discloses the exchange of information between requester and an expert (see col. 18, lines 31-56; see also col. 26, lines 15-21).

It would have been obvious to include email capabilities in the system disclosed in the **Unger et al.** reference, since this would facilitate the exchange and accumulation of analysis and opinion information from experts without the necessity of having the experts all co-located at the central information facility.

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Regarding claim 5, **Unger et al.** additionally teaches a computer-based system wherein the IP information extraction computer unit further comprises:

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- a) a data converter for converting front page data and outputting the same to the IP information analyzing computer unit (see disclosure that the documents and/or abstracts and/or claims and/or technical indexing may be electronically stored in a relational database and linked to the categorization which reflects the overall hierarchical model, and furthermore that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51; see also disclosure at Stage III of drawing Figure 1 of front page information received and parsed into the database; see also disclosure that the full-text sources of patents or technical documents can reside on the Internet, col. 3, line 66 through col. 4, line 2).); and
- b) a specialized information extraction computer unit for requesting specialized IP information according to a URL for accessing the on-line information DB, and pre-registered access information including an access period, technical classifications, and a search format, and receiving

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and outputting the specialized IP information (see disclosure that a set of expert searches [search strategy formulas] can be executed against a new set of patents and/or technical documents, col. 5, lines 64-66; see also col. 7, lines 26-40; see also disclosure that the full-text sources of patents or technical documents can reside on the Internet, col. 3, line 66 through col. 4, line 2).

Regarding claims 6 and 13, **Unger et al.** additionally teaches a computer-based system wherein the IP information analyzing computer unit further comprises:

- a) a first DB for storing patent team opinion contents of at least one of front pages or specialized pages (see disclosure of the storage of a matrix of expert opinions, representing the cumulative opinion of a group of expert technical staff and/of scientists, col. 10, lines 40-48; see also col. 11, lines 34-45);
- b) a second DB for storing research center opinion contents of at least one of front pages or specialized pages (see disclosure of the storage of a matrix of expert opinions, representing the cumulative opinion of a group of expert technical staff and/of scientists, col. 10, lines 40-48; see also col. 11, lines 34-45);

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- c) a quantitative analysis computer unit for outputting predetermined quantitative analysis graphs (see drawing Figures 2 through 4);
- d) a management module for generating technical classifications and search strategy formulas for extracting IP information (see disclosure that the database disaggregates a set of patents and/or technical documents into discrete technical categories by use of a set of pre-defined search protocols which match the scientific or technical concepts within the model, col. 3, lines 8-17); and
- e) a DB management computer unit for receiving the front pages or specialized pages from the IP information extraction computer unit and storing this information in the first DB, storing the research center opinion contents received from the research center analyzing computer unit in the second DB, and outputting signals for generating analysis graphs to the quantitative analysis computer unit (see disclosure that the documents and/or abstracts and/or claims and/or technical indexing may be electronically stored in a relational database and linked to the categorization which reflects the overall hierarchical model, and furthermore that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51;

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see also disclosure of the storage of a matrix of expert opinions, representing the cumulative opinion of a group of expert technical staff and/of scientists, col. 10, lines 40-48; see also col. 11, lines 34-45).

Regarding claims 7 and 14, **Unger et al.** additionally teaches a computer-based system wherein **extraction periods of the IP information extraction computer unit are in real-time or programmed at predetermined intervals** (see disclosure that a set of expert searches [search strategy formulas] can be executed against a new set of patents and/or technical documents, and that this new set may represent recently published patents or technical documents, col. 5, line 64 through col. 6, line 1, explicitly disclosing the real-time extraction of IP information, and clearly suggesting extraction performed at predetermined intervals).

Regarding claims 9 and 16, **Unger et al.** additionally teaches a computer-based system wherein **the IP information analyzing computer unit separates and displays analyzed data and data that have not been analyzed** (see disclosure that the system allows patents and/or technical documents to be electronically captured and analyzed at a convenient time, col. 6, lines 24-26).

Regarding claims 10 and 17, **Walker et al.** additionally teaches a computer-based system wherein **the email receiving/transmitting computer unit registers a plurality of predetermined email addresses according subject or field** (see disclosure of the expert database including email address and expert profile including subject area of expertise, col. 14, lines 25-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to maintain a list of email addresses according to subject or field, since this would allow a user to submit a request to an expert having expertise in a subject field which corresponds to the request.

Regarding claim 12, **Unger et al.** additionally teaches a computer-based system wherein the IP information extraction computer unit further comprises:

a) a front page extraction computer unit for requesting front pages of IP

information according to a universal resource locator (URL) for accessing
the on-line IP information DB, and pre-registered access information
including an access period, technical classifications, and a search format,
and receiving and outputting the front pages (see disclosure that the
documents and/or abstracts and/or claims and/or technical indexing may

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be electronically stored in a relational database and linked to the categorization which reflects the overall hierarchical model, and furthermore that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51; see also disclosure at Stage III of drawing Figure 1 of front page information received and parsed into the database; see also disclosure that the full-text sources of patents or technical documents can reside on the Internet, col. 3, line 66 through col. 4, line 2);

b) a data converter for converting front page data and outputting the same to the IP information analyzing computer unit (see disclosure that the documents and/or abstracts and/or claims and/or technical indexing may be electronically stored in a relational database and linked to the categorization which reflects the overall hierarchical model, and furthermore that the documents, etc., can be displayed on a computerized graphical interface [research center personal computers], col. 3, lines 46-51; see also disclosure at Stage III of drawing Figure 1 of front page information received and parsed into the database; see also disclosure that the full-text sources of patents or technical documents can reside on the Internet, col. 3, line 66 through col. 4, line 2).); and

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c) a specialized information extraction computer unit for requesting specialized IP information according to a URL for accessing the on-line information DB, and pre-registered access information including an access period, technical classifications, and a search format, and receiving and outputting the specialized IP information (see disclosure that a set of expert searches [search strategy formulas] can be executed against a new set of patents and/or technical documents, col. 5, lines 64-66; see also col. 7, lines 26-40; see also disclosure that the full-text sources of patents or technical documents can reside on the Internet, col. 3, line 66 through col. 4, line 2).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Unger et al.** (U.S. Patent 5,721,910) in view of **Adler et al.** (U.S. Patent Application Publication 2003/0033295) in view of **Walker et al.** (U.S. Patent 5,862,223) as applied to claims 4-7, 9-14, 16 and 17 above, and further in view of **Ohtsuka** (U.S. Patent 6,088,765).

Regarding claim 18, **Unger et al.**, **Adler et al.** and **Walker et al.** teach a computer-based system for analyzing and utilizing intellectual property (IP) information substantially as claimed.

None of **Unger et al.**, **Adler et al.** nor **Walker et al.** explicitly teaches a computer-based system wherein the predetermined intervals are determined based upon the number of times a user connects to the computer-based system for analyzing and utilizing IP information.

**Ohtsuka**, however, teaches a system wherein stored information is periodically updated based upon the number of times a user connects to the system (see disclosure that address information is periodically updated in accordance with a frequency of access, col. 20, lines 33-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to update stored data based upon the frequency with which a user of the data accesses the system, since it would be a waste of system resources to update data at a much greater frequency than the frequency with which the user accesses the system; for

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instance, it might be wasteful to update data daily if the user accesses the system only

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monthly.

(10) Response to Argument

This Examiner's Answer will address the Appellant's arguments in the order in

which they appear in the appeal brief.

A. Issue 1

The Rejection of Claims 4-7, 9-14 and 16-18 under 35 U.S.C. § 101

Regarding claims 4-7, 9-14 and 16-18, the Appellants argue that (1) the recitation

of various 'units' in the claims as 'computer units' serves to place the claims in a statutory

category of invention by associating the claim elements with appropriate hardware.

In response, the examiner presents the following arguments.

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Regarding argument (1) [that the recitation of various 'units' in the claims as 'computer units' serves to place the claims in a statutory category of invention], the examiner respectfully disagrees.

The claims at issue are written as system claims ("A computer-based system...") which comprises a number of 'units'. The Applicants' specification fails to provide any definition for the claimed 'units', and given the context of the claims, an ordinary artisan would have interpreted the claimed 'units' and being embodied in software. See *In re Warmerdam* (CAFC) 31 USPQ2d 1754 at 1759.

In order for software claims to be statutory, they must be claimed in combination with an appropriate medium and/or hardware to establish a statutory category of invention and enable any functionality to be realized. Compare *In re Lowry* (CAFC) 32 USPQ2d 1031 at 1031,1035 (claim to a data structure stored on a computer readable medium that increases computer efficiency held statutory) and *In re Warmerdam* (CAFC) 31 USPQ2d 1754 at 1759 (claim to computer having a specific data structure stored in memory held a statutory product-by-process claim) with *In re Warmerdam* (CAFC) 31 USPQ2d 1754 at 1760 (claim to a data structure <u>per se</u> held non-statutory).

The Applicants have attempted to render the claims statutory under 35 U.S.C. § 101 by substituting the term 'computer unit' for 'unit' throughout the claims. However, this is insufficient to remedy the deficiencies of the claims.

Since software require a computer of some kind in order to be executed, it is reasonable to characterize units of software as 'computer units'. In the absence of any disclosure in the Applicants' specification regarding the nature of the claimed 'computer units', merely characterizing a software unit as a 'computer unit' is not sufficient to clearly limit the claimed units to a hardware implementation.

As such, the claims are drawn to a system whose limitations are all software per se, and thus non-statutory.

For these reasons, the examiner maintains that the rejections of claims 4-7, 9-14 and 16-18 under 35 U.S.C. § 101 are proper, and should be sustained.

#### B. Issue 2

The Rejection of Claims 1 and 3 under 35 U.S.C. § 103(a)

Regarding claims 1 and 3, the Appellants argue that (1) the prior art of record fails to disclose the transmission of first and second IP information converted into a standard format to a research center analyzing unit, since a research center analyzing unit is clearly not a graphical user interface; that (2) the prior art of record does not disclose extracting second IP information corresponding to the first IP information upon a request for detailed information; that (3) the prior art of record fails to disclose determining if third IP information including technical analyses and opinion contents have been received from the research center analyzing unit; that (4) the prior art of record fails to disclose storing a plurality of predetermined keywords; and that (5) the Adler et al. reference fails to disclose or suggest an IP information extraction unit, an IP information analyzing unit, or a research center analyzing unit, or Applicant's sequence of steps.

In response, the examiner presents the following arguments.

Regarding argument (1) [that the prior art of record fails to disclose the transmission of first and second IP information converted into a standard format to a

research center analyzing unit, since a research center analyzing unit is clearly not a graphical user interface], the examiner respectfully disagrees.

The limitation at issue merely defines the *transmission* of data. Also mentioned in the claim limitation are the fact that the data is in 'standard form', and that it is transmitted to a 'research center analyzing unit'. Both of these terms, however, are subject to a broad interpretation, since there is no language to further limit them.

Thus, the claimed 'standard form' could reasonably be interpreted as meaning, for instance, ASCII (or any other 'standard' form).

Similarly, the 'research center analyzing unit' is not further defined in the claims and as such, any 'unit' which would allow 'analysis' to be performed could qualify. For instance, if an analyst were able to perform analysis on data transmitted to a computerized graphical interface (such as disclosed in the **Unger et al.** reference at col. 3, lines 46-51), then that computerized graphical interface would constitute the claimed 'research center analyzing unit'.

Regarding argument (2) [that the prior art of record does not disclose extracting second IP information corresponding to the first IP information upon a request for detailed information], the examiner respectfully disagrees.

The **Unger et al.** reference discloses that an electronic database if IP information is stored, and that the database also includes links to full-text sources of patents or technical documents either in a database, on a CD-ROM, a local LAN, a Wide-Area-LAN or on the Internet. See col. 3, line 60 through col. 4, line 7 et seq.

Clearly, submitting a request for retrieval of the full-text sources of relevant patents or technical documents anticipates the claimed "accessing the Internet websites and extracting second IP information corresponding to the first IP information upon a request for detailed information" (claim 1), and "requesting detailed information corresponding to the IP information that is related to the at least one project from the IP information extraction unit" (claims 4 and 11).

Regarding argument (3) [that the prior art of record fails to disclose determining if third IP information including technical analyses and opinion contents have been received from the research center analyzing unit], the examiner respectfully disagrees.

The **Unger et al.** reference discloses a system that receives and stores a matrix of expert opinions representing the cumulative opinion of a group of expert technical staff and/or scientists, see col. 10, lines 40-48 and col. 11, lines 34-45.

Since the system must determine that said cumulative opinion of a group of expert technical staff or scientists (analogous to the claimed technical analyses and opinion contents) has been received as a prerequisite to storing it, and the prior art does disclose its storage, the determination that it has been received is inherently taught by the reference.

Regarding argument (4) [that the prior art of record fails to disclose storing a plurality of predetermined keywords], the examiner respectfully disagrees.

The **Unger et al.** reference discloses a system wherein a Technical Subject

Hierarchy is used to create a set of sophisticated expert technical searches (ETS), using
the best chemical and technical indexing available along with the text of the patent
abstracts and/or the patent claims and/or the technical document. The expert search is
created to identify patents or technical documents that are pertinent to each individual

category within the Customized Technical Subject Hierarchy. See col. 5, line 51 through col. 6, line 4.

This disclosure is analogous to the claimed IP information extraction unit which requests IP information and stores a plurality of keywords associated with said extracted IP information.

Regarding argument **(5)** [that the **Adler et al.** reference fails to disclose or suggest an IP information extraction unit, an IP information analyzing unit, or a research center analyzing unit, or Applicant's sequence of steps], the examiner respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case, the limitations argued are taught by the **Unger et al.** reference, as discussed in the response to arguments above.

Furthermore, the **Adler et al.** reference discloses the use of a relevancy filter which is used to filter out irrelevant IP information during a search (see paragraphs

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[0044]-[0045]), analogous to the claimed discarding first IP information upon a determination by the research center analyzing unit that the first IP information is not related to at least one project accessibly by the research center analyzing unit.

For these reasons, the examiner maintains that the rejections of claims 1 and 3 under 35 U.S.C. § 103(a) are proper, and should be sustained.

#### C. Issue 3

## The Rejection of Claims 4-7, 9-14, 16 and 17 under 35 U.S.C. § 103(a)

Regarding claims 4-7, 9-14, 16 and 17, the Appellants argue that (1) the **Walker et al.** reference fails to teach or suggest accessing an on-line information DB at predetermined periods using keywords to provide intellectual property information to a research center that accumulates intellectual property analysis data.

In response, the examiner presents the following arguments.

Regarding argument (1) [that the **Walker et al.** reference fails to teach or suggest accessing an on-line information DB at predetermined periods using keywords to provide intellectual property information to a research center that accumulates intellectual property analysis data], the examiner respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case, the limitations argued are taught by the **Unger et al.** reference, at col. 5, line 64 through col. 6, line 1, as detailed in the rejections of record (claims 7 and 14).

The **Walker et al.** reference is relied upon to teach a system including an email receiving/transmitting unit (see col. 15, lines 21-42 et seq.), the Applicants' limitations of transmitting IP information and receiving opinion contents via email having been given no patentable weight as being merely a statement of intended use, although the reference also discloses the exchange of information between requester and an expert (see col. 18, lines 31-56; see also col. 26, lines 15-21).

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For these reasons, the examiner maintains that the rejections of claims 4-7, 9-14, 16 and 17 under 35 U.S.C. § 103(a) are proper, and should be sustained.

#### D. Issue 4

# The Rejection of Claim 18 under 35 U.S.C. § 103(a)

Regarding claims 4-7, 9-14, 16 and 17, the Appellants argue that **(1)** the **Ohtsuka** reference fails to teach or suggest accessing an on-line information DB at predetermined periods using keywords to provide intellectual property information to a research center that accumulates intellectual property analysis data.

In response, the examiner presents the following arguments.

Regarding argument (1) [that the **Ohtsuka** reference fails to teach or suggest accessing an on-line information DB at predetermined periods using keywords to

provide intellectual property information to a research center that accumulates intellectual property analysis data], the examiner respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case, the limitations argued are taught by the **Unger et al.** reference, at col. 5, line 64 through col. 6, line 1, as detailed in the rejections of record (claims 7 and 14).

The **Ohtsuka** reference is relied upon to teach a system wherein stored information is periodically updated based upon the number of times a user connects to the system (see disclosure that address information is periodically updated in accordance with a frequency of access, col. 20, lines 33-36).

For these reasons, the examiner maintains that the rejections of claim 18 under 35 U.S.C. § 103(a) are proper, and should be sustained.

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# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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#### Conclusion

Claims 4-18 are properly rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 and 3 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over **Unger et al.** (U.S. Patent 5,721,910) in view of **Adler et al.** (U.S. Patent Application Publication 2003/0033295).

Claims 4-7, 9-14, 16 and 17 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over **Unger et al.** (U.S. Patent 5,721,910) in view of **Adler et al.** (U.S. Patent Application Publication 2003/0033295) in view of **Walker et al.** (U.S. Patent 5,862,223).

Claim 18 is properly rejected under 35 U.S.C. 103(a) as being unpatentable over **Unger et al.** (U.S. Patent 5,721,910) in view of **Adler et al.** (U.S. Patent Application Publication 2003/0033295) in view of **Walker et al.** (U.S. Patent 5,862,223) as applied to claims 4-7, 9-14, 16 and 17 above, and further in view of **Ohtsuka** (U.S. Patent 6,088,765).

In light of the foregoing arguments, the Examiner respectfully requests the

Honorable Board of Appeals to sustain the rejections.

/John R. Cottingham/ Supervisory Patent Examiner, Art Unit 2167

/Eddie C. Lee/ Supervisory Patent Examiner, TC 2100 Respectfully submitted,

Jule & Wassen

/Luke S. Wassum/ Primary Examiner

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Conferees: John R. Cottingham Eddie C. Lee

lsw 21 May 2009